LPDES PERMIT NO. LA0006041 (Agency Interest No. 2719)

LPDES FACT SHEET and RATIONALE
FOR THE DRAFT LOUISIANA POLLUTANT DISCHARGE ELIMINATION SYSTEM (LPDES) PERMIT TO DISCHARGE TO WATERS OF LOUISIANA

I. Company/Facility Name: Motiva Enterprises LLC
Convent Refinery
Post Office Box 37
Convent, Louisiana 70723

II. Issuing Office: Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services
Water Permits Division
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313

III. Prepared By: Melanie Beard Connor
Industrial Water Permits Section
Water Permits Division
Phone #: (225) 219-3088
Fax #: (225) 219-3309
E-mail: melanie.connor@la.gov

Date Prepared: December 14, 2008

LAC 33:IX Citations: Unless otherwise stated, citations to LAC 33:IX refer to promulgated regulations listed at Louisiana Administrative Code, Title 33, Part IX.

40 CFR Citations: Unless otherwise stated, citations to 40 CFR refer to promulgated regulations listed at Title 40, Code of Federal Regulations in accordance with the dates specified at LAC 33:IX.4901, 4903, and 2301.F.

IV. Permit Action/Status:

A. Reason For Permit Action:

Proposed reissuance of a Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term following regulations promulgated at LAC 33:IX.2711/40 CFR 122.46.

In order to ease the transition from NPDES to LPDES permits, dual regulatory references are provided where applicable. The LAC references are the legal references while the 40 CFR references are presented for informational purposes

only. In most cases, LAC language is based on and is identical to the 40 CFR language. 40 CFR Parts 401, 405-415, and 417-471 have been adopted by reference at LAC 33:IX.4903 and will not have dual references. In addition, state standards (LAC 33:IX. Chapter 11) will not have dual references.

B. LPDES permit: Permit effective date: June 1, 2004
Minor modification dates: November 1, 2006, and April 25, 2007

Permit expiration date: May 31, 2009

EPA has not retained enforcement authority.

C. Application submittal date: Application received on May 29, 2009, application addendum received on January 29, 2010

V. Facility Information:

A. Location – 10700 Louisiana Highway 44, Convent, St. James Parish

B. Applicant Activity -

According to the application, Motiva Enterprises produces four major products including Gasoline, Avjet, Diesel and Fuel Oil by the use of topping and cracking.

Below is a summary of the proposed production rates and mass contributing flows:

Process	Proposed Production (1000 bbl/day)
Feedstock Rate	247
Crude: Atmospheric Crude Distillation	247
Crude: Crude Desalting	247
Crude: Vacuum Crude Distillation	116
Cracking: Fluid Catalytic Cracking	90
Cracking: Hydrocracking	50
Cracking: Hydrotreating	189
Topping: H_2SO_4 Alkylation	17
Topping: Catalytic Reforming	41
Ballast Flow	10 K gal/day
Stormwater Flow	342 K gal/day

C. Technology Basis - (40 CFR Chapter 1, Subchapter N/Parts 401, 405-415, and 417-471 have been adopted by reference at LAC 33:IX.4903)

Guideline	Reference
Refinery Guidelines	40 CFR 419, Subpart B

Other sources of technology based limits:

- LDEQ Stormwater Guidance, letter dated 6/17/87, from J. Dale Givens (LDEQ) to Myron Knudson (EPA Region 6)
- Best Professional Judgement

D. Fee Rate -
1. Fee Rating Facility Type: Major
2. Complexity Type: V
3. Wastewater Type: II
4. SIC code: 2911, 2819, 5171 and 4463

E. Continuous Facility Effluent Flow - 4.1 MGD (30-Day Maximum)

VI. Receiving Waters: Mississippi River (Outfalls 001 and 003) and Ascension ditch thence to St. James Canal thence to Blind River (Outfall 002)

A. Mississippi River:

1. TSS (15%), mg/L: 32 mg/l*
2. Average Hardness, mg/L $CaCO_3$: 153.4 mg/l*
3. Critical Flow, cfs: 141,955 *
4. Mixing Zone Fraction: 1/3 *
5. Harmonic Mean Flow, cfs: 366,748*
6. River Basin: Mississippi River, Segment No.: 070301
7. Designated Uses: primary contact recreation, secondary contact recreation, fish and wildlife propagation, and drinking water supply

* Information based on the following: Memorandum from Todd Franklin to Melanie Connor dated January 13, 2010. Determinations of water quality characteristics were taken from ambient monitoring station No. 319 on the Mississippi River East of Plaquemine at the Plaquemine ferry landing, midstream. (See Appendix C)

B. Ascension ditch thence to St. James Canal thence to Blind River:

1. River Basin: Lake Pontchartrain, Segment 040403

2. Designated Uses: primary contact recreation, secondary contact recreation, fish and wildlife propagation, and outstanding natural resources

VII. Outfall Information:

Outfall 001

A. Type of wastewater – Continuous discharge of treated process wastewaters including stripped sour water; utility wastewaters; sanitary and potable wastewaters; boiler and cooling tower blowdown; zeolite and regeneration wastewaters; contaminated stormwater from the refinery, sales terminal and sulfuric acid pipeline area; ballast and dock area wastewater; tank water drawdown; leachate from biosludge landfarm; wastewater from remediation projects; drainage from old landfarm areas; fire fighting wastewater; hydrostatic test water; miscellaneous wastewaters which include but are not limited to sand filter backwash, service water return, heat exchanger backwashes, unit wash down, eye wash and safety shower waters, sulfur rack water spray, maintenance, I & T, chemical cleaning, bundle cleaning wastewaters, area wash down, steam trap condensate; minor quantities of off-site wastewaters similar in characteristics to what is generated within the refinery; wastewater from the Wet Gas Scrubber (WGS) Purge Treatment Unit; and WGS area drainage and overflows

B. Location – At the point of discharge from the treatment facility prior to combining with other waters (Latitude 30° 6' 33", Longitude 90° 54'39")

C. Treatment – treatment of wastewater consists of:
- API oil/water separator
- Equalization tank
- Communutor (sanitary waste only)
- Activated sludge
- Biological treatment (including aeration, clarifiers and settling)
- Pressure sand filters

D. Flow – Continuous: 4.1 MGD (30-day Maximum)

E. Receiving waters – Mississippi River

F. Basin and segment – Mississippi River Basin, Segment 070301

Outfall 002

A. Type of wastewater – Intermittent discharge of non-process area stormwater from the refinery proper; uncontaminated stormwater runoff from the sulfuric acid pipeline area and staged activated sludge treatment area; tank farm drainage; stormwater from the Wet Gas Scrubber area; stormwater from the Raw Water Treatment Clarifier Area; stormwater from the closed hazardous waste landfarms; post first flush stormwater from the refinery, sales terminal and sulfuric acid pipeline area*; steam trap condensate; cooling tower drift; fire test waters, fire water and foam from firefighting activities, and fire water leaks; raw Mississippi River water, service water, clarified water, deminimus leaks from the Outfall 001 effluent line after the sample point, deminimus exterior building wash water and previously monitored hydrostatic test water from Outfall 004

* Post first flush stormwater shall be defined as the stormwater discharges that occur after the first 1 inch of rainfall in a 24-hour period.

B. Location – At the point of discharge from the stormwater holding pond prior to mixing with waters from undeveloped areas (Latitude 30° 7' 9", Longitude 90° 52' 58")

C. Treatment – None

D. Flow – Intermittent, varies with rainfall (estimated flow 18.81 MGD)

E. Receiving waters – Ascension ditch thence to St. James Canal thence to Blind River

F. Basin and segment – Lake Pontchartrain Basin, Segment 040403

Outfall 003

A. Type of wastewater – Continuous discharge of clarifier underflow; stormwater from the Raw Water Treatment Clarifier Area; raw water and process samples from the clarifiers, sand filters and clean wells and overflow from raw water treatment clarifiers

B. Location – At the point of discharge from the common header receiving discharge from the underflow of the raw water intake clarifiers and the discharge from the clarifier drainage sump prior to discharging into the Mississippi River (Latitude 30° 6' 33", Longitude 90° 54' 39")

C. Treatment – None

D. Flow – Intermittent, 0.13 MGD

E. Receiving waters – Mississippi River

F. Basin and segment – Mississippi River Basin, Segment 070301

Outfall 004

A. Type of wastewater – The intermittent discharge of hydrostatic test waters

B. Location – At the point of discharge from the vessels being tested prior to combining with other waters at Outfall 002

C. Treatment – None

D. Flow – Intermittent flow is variable

E. Receiving waters – Ascension ditch thence to St. James Canal thence to Blind River

F. Basin and segment – Lake Pontchartrain Basin, Segment 040403

VIII. Proposed Permit Limits and Rationale:

The specific effluent limitations and/or conditions will be found in the draft permit. Development and calculation of permit limits are detailed in the Permit Limit Rationale section below.

The following section sets forth the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the draft permit. Also set forth are any calculations or other explanations of the derivation of specific effluent limitations and conditions, including a citation to the applicable effluent limitation guideline or performance

standard provisions as required under LAC 33:IX.2707/40 CFR Part 122.44 and reasons why they are applicable or an explanation of how the alternate effluent limitations were developed.

A. PERMIT CHANGES

1. Outfall 001 – Permit limits for BOD, COD, Ammonia, TSS, Oil & Grease, Sulfide, Phenolic Compounds, Chromium VI and Total Chromium have increased/decreased based upon the production information provided in the LPDES permit application addendum received on January 28, 2010.

2. Outfall 001 – Eye wash and safety shower waters have been added to the wastewater description.

3. Outfall 001 - Phosphorus monitoring from the previous permit has been removed. This pollutant was added to the previous permit because at the time, phosphorus was a stream impairment listed on the 305(b) report. Since that time, the receiving waterbody segment (070301) has been delisted.

4. Outfall 002 - Post first flush stormwater from the refinery, sales terminal and sulfuric acid pipeline area, cooling tower drift, service water, and deminimus exterior building wash water were added to the wastewater description.

5. Outfall 001 - The biomonitoring dilution series percentages have decreased based upon new flow information.

6. The permittee requested that this Office add Oil & Grease and the Limit of Quantitation (LOQ) of 4.6 mg/l to Part II of the permit whereby if an analytical test result is less than LOQ, a value of zero may be used for that individual result for purposes of calculating and reporting mass. This Office concurs with this request. The permittee may report zero (0) for Oil & Grease if it is not detected in laboratory analyses, as long as an EPA approved method is being used by the laboratory which specifies a 4.6 mg/l minimum limit of quantification. This minimum level of quantitation has been specified Part II of the permit.

7. Outfall 001 - This Office has reduced the monitoring frequencies for BOD, Oil & Grease, TSS, Ammonia, Sulfide and Phenolic Compounds based upon the USEPA Memorandum "Interim Guidance for Performance-Based Reductions of NPDES Permit Monitoring Frequencies.

8. Outfall 001 – In accordance with current office guidance, the sample type for Phenolic Compounds has been changed to Grab.

9. Language has been added to Part II of the permit authorizing alternative procedures for reporting continuous pH and Flow while the facility's backup continuous monitoring devices have failed. See Part II Paragraphs I and K.

10. Outfall 002 – Reporting requirements for total nitrogen, total phosphorus and turbidity were added to the permit for data gathering purposes for possible future TMDL development. The monitoring frequency has been established at 1/quarter based upon BPJ.

11. Outfall 004 – This internal outfall has been added to the permit for hydrostatic test wastewater as per current Office guidance for permitting hydrostatic test discharges at industrial facilities.

B. TECHNOLOGY-BASED VERSUS WATER QUALITY STANDARDS-BASED EFFLUENT LIMITATIONS AND CONDITIONS

Following regulations promulgated at LAC 33:IX.2707.L.2.b/40 CFR Part 122.44(l)(2)(ii), the draft permit limits are based on either technology-based effluent limits pursuant to LAC 33:IX.2707.A/40 CFR Part 122.44(a) or on State water quality standards and requirements pursuant to LAC 33:IX.2707.D/40 CFR Part 122.44(d), whichever are more stringent.

TECHNOLOGY-BASED EFFLUENT LIMITATIONS AND CONDITIONS

Regulations promulgated at LAC 33:IX.2707.A/40 CFR Part 122.44(a) require technology-based effluent limitations to be placed in LPDES permits based on effluent limitations guidelines where applicable, on BPJ (best professional judgement) in the absence of guidelines, or on a combination of the two. The following is a rationale for the limitations established in the permit.

Motiva Enterprises, LLC is subject to Best Practicable Control Technology Currently Available (BPT) and Best Available Technology Economically Achievable (BAT) effluent limitation guidelines listed below:

Manufacturing Operation	Guideline
Petroleum Refining Point Source Category	40 CFR 419, Subpart B

WATER QUALITY-BASED EFFLUENT LIMITATIONS

Technology-based effluent limitations and/or specific analytical results from the permittee's application were screened against state water quality numerical standard based limitations by following guidance procedures established in the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, October 7, 2009.

In accordance with 40 CFR 122.44(d)(I)/LAC 33:IX.2707.D.1., the existing discharge was evaluated in accordance with the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, October 7, 2009, to determine whether pollutants would be discharged "at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any state water quality standard." Calculations, results, and documentation are given in Appendix B.

As a result of the screen, no pollutants received water quality based effluent limitations.

Minimum quantification levels (MQLs) for state water quality numerical standards-based effluent limitations are set at the values listed in the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, October 7, 2009. They are also listed in Part II of the permit.

To further ensure compliance with 40 CFR 122.44(d)(I), whole effluent toxicity testing has been established for Outfall 001 (See Section VII.D below).

C. PROPOSED PERMIT LIMITS

Outfall 001 – Continuous discharge of treated process wastewaters including stripped sour water; utility wastewaters; sanitary and potable wastewaters; boiler and cooling tower blowdown; zeolite and regeneration wastewaters; contaminated stormwater from the refinery, sales terminal and sulfuric acid pipeline area; ballast and dock area wastewater; tank water drawdown; leachate from biosludge landfarm; wastewater from remediation projects; drainage from old landfarm areas; fire fighting wastewater; hydrostatic test water; miscellaneous wastewaters which include but are not limited to sand filter backwash, service water return, heat exchanger backwashes, unit wash down, eye wash and safety shower waters, sulfur rack water spray, maintenance, I & T, chemical cleaning, bundle cleaning wastewater, area wash down, and steam trap condensate; minor quantities of off-site wastewaters similar in characteristics to what is generated within the refinery; wastewater from the Wet Gas Scrubber (WGS) Purge Treatment Unit; and WGS area drainage and overflows

Parameter	Proposed Permit Limits		Monitoring Frequency	Rationale
	Monthly Avg lbs/day	Daily Max lbs/day		
Flow – MGD	Report	Report	Continuous	LAC 33:IX.2707.I.1.b.
pH – s.u.	See (*1) below	See (*1) below	Continuous	Previous permit, LAC 33:IX.1113, 40 CFR 419, Subpart B
BOD	1993	3589	1/week	40 CFR 419, Subpart B
TSS	1596	2501	1/week	40 CFR 419, Subpart B
Oil & Grease	581	1091	1/week	40 CFR 419, Subpart B
COD	13907	26837	1/week	40 CFR 419, Subpart B
Ammonia (as N)	1045	2299	1/week	40 CFR 419, Subpart B
Sulfide (as S)	10.1	22.6	1/week	40 CFR 419, Subpart B

Phenolic Compounds	13	26.8	1/week	40 CFR 419, Subpart B
Total Chromium	18.7	53.8	1/year	40 CFR 419, Subpart B
Chromium (6+)	1.6	3.5	1/year	40 CFR 419, Subpart B
Biomonitoring	See Section E below	See Section E below	1/year	See Section E below

(*1) The pH shall be within the range of 6.0 – 9.0 standard units at all times subject to continuous monitoring pH range excursion provisions. Where a permittee continuously measures the pH of wastewater as a requirement or option in an LPDES permit, the permittee shall maintain the pH of such wastewater within the range set forth in the permit, except that excursions from the range are permitted, provided:

a. The total time during which the pH values are outside the required range of pH values shall not exceed 446 minutes in any calendar month; and
b. No individual excursion from the range of pH values shall exceed 60 minutes.

EFFLUENT LIMITATIONS BASIS for Outfall 001:

Flow: The requirement to report flow is based upon LAC 33:IX.2707.I.1.b. and the previous permit.

pH: Requirements are based upon the previous permit and LAC 33:IX.1113.C.1 and 40 CFR 419, Subpart B.

BOD, TSS, COD, Oil & Grease, Ammonia, Sulfide, Phenolic Compounds, Total Chromium, and, Chromium VI: Limitations are based upon 40 CFR 419 Subpart B. See Appendix A for more information on calculation of the limitations.

Whole Effluent Toxicity Testing: See Section D below for justification of requirements.

Outfall 002 – Intermittent discharge of non-process area stormwater from the refinery proper; uncontaminated stormwater runoff from the sulfuric acid pipeline area and staged activated sludge treatment area; tank farm drainage; stormwater from the Wet Gas Scrubber area; stormwater from the Raw Water Treatment Clarifier Area; stormwater from the closed hazardous waste landfarms; post first flush stormwater from the refinery, sales terminal and sulfuric acid pipeline area; steam trap condensate; cooling tower drift; fire test waters; fire water and foam from firefighting activities; fire water leaks; raw Mississippi River water; service water; clarified water; deminimus leaks from the Outfall 001 effluent line after the sample point; deminimus exterior building wash water and previously monitored hydrostatic test water from Outfall 004

Parameter	Proposed Permit Limitations		Monitoring Freq.	Rationale
	Monthly Avg mg/l	Daily Max mg/l		
Flow	Report	Report	1/day	LAC 33:IX.2707.I.1.b.
pH	6.0 s.u. (Min)	10.0 s.u. (Max)	1/day	Previous permit, LDEQ Stormwater Guidance
TOC	---	35	1/day	BPJ, previous permit
Oil & Grease	---	15	1/day	Previous permit, LDEQ Stormwater Guidance
Alkalinity(*1) Phenolphthalein Method	Report	Report	1/day	BPJ, Previous permit
Turbidity	---	Report	1/quarter	BPJ
Total Phosphorus (as P)	---	Report	1/quarter	BPJ
Total Nitrogen (as N)	---	Report	1/quarter	BPJ

(*1) Alkalinity shall be monitored during periods when pH exceeds 9.0 standards units.

EFFLUENT LIMITATIONS BASIS for Outfall 002:

Flow: The requirement to report flow is based upon LAC 33:IX.2707.I.1.b.

TOC: Limitations are based upon BPJ and the previous permit.

Oil & Grease: Limitations are based upon BPJ, previous permit and LDEQ's stormwater guidance [letter dated 6/17/87, from J. Dale Givens (LDEQ) to Myron Knudson (EPA Region 6)].

pH and Alkalinity: Requirements are based upon BPJ and the previous permit. The stormwater retention pond at Motiva often contains an abundance of algae blooms and plant life. It has been documented in various literatures that the pH in a pond varies throughout the day due to respiration and photosynthesis of plant life. The maximum pH at Outfall 002 were increased to 10 s.u. due to this phenomenon. After sunset, in a pond, photosynthesis stops and plant life consumes oxygen and releases CO_2 (respiration). The CO_2 reacts with water to form a mild acid (carbonic acid). In the morning CO_2 concentrations are high causing a low pH as a result of the respiration that occurred overnight. As the sun rises, plants and algae begin photosynthesis and because they use CO_2 in photosynthesis, the pH of the pond water increases as carbonic acid (i.e. CO_2) is removed. Also plants can combine bicarbonates (HCO_3) to form CO_2 for photosynthesis, and carbonate (CO_3^{-2}) is released. The release of carbonate converted from bicarbonate by plant life can cause pH to climb dramatically (above 9) during periods of rapid photosynthesis by dense algae blooms. This drastic rise in pH occurs in low alkalinity water. Low alkalinity water in a pond during instances of high pH is a good indication that the rise in pH is caused by the photosynthesis of plant life. Therefore the permittee is required to report alkalinity to show that elevated pH levels are not attributed to other causes. This same rationale was used in establishing the pH and alkalinity requirements for Outfall 002 in NPDES fact sheet dated April 8, 1992 (EDMS document #15032370).

Turbidity, Total Phosphorus, Total Nitrogen: Reporting requirements have been established in the permit due to the receiving stream's 303(d) status.

Outfall 003 – Continuous discharge of clarifier underflow; stormwater from the Raw Water Treatment Clarifier Area; raw water and process samples from the clarifiers, sand filters and clean wells and overflow from raw water treatment clarifiers

Parameter	Proposed Permit Limitations		Monitoring Freq.	Rationale
	Monthly Avg	Daily Max		
Flow – MGD	Report	Report	1/day	LAC 33:IX.2707.I.1.b.
pH	Report (s.u.)	Report (s.u.)	1/day	BPJ, Previous permit
Coagulants(*1)	---	---	1/month	BPJ, previous permit

(*1) The quantity and types of all coagulants (clarifying agents) used in the raw river water treatment clarification system during the sampling month shall be recorded. Records of the quantity and type of coagulants used shall be retained for three (3) years following Part III.C.3. No DMR reporting shall be required.

EFFLUENT LIMITATIONS BASIS for Outfall 003:

Flow, pH, Coagulants: Reporting requirements are based upon current office guidance for clarifier underflow discharges.

Outfall 004 – Intermittent discharge of hydrostatic test wastewater

Parameter	Proposed Permit Limits		Monitoring Frequency	Rationale
	Monthly Avg	Daily Max		
Flow	Report	Report	1/discharge	LAC 33:IX.2707.I.1.b.
pH(*1)	6.0 s.u.(min)	9.0 s.u.(max)	1/discharge	LAG670000
TSS(*1)(*2)	----	90 mg/L	1/discharge	LAG670000

Oil & Grease(*1)	----	15 mg/L	1/discharge	LAG670000
TOC(*1)	----	50 mg/L	1/discharge	LAG670000
Benzene(*1)	----	50 µg/L	1/discharge	LAG670000
Total BTEX(*1)	----	250 µg/L	1/discharge	LAG670000
Total Lead(*1)	----	50 µg/L	1/discharge	LAG670000

(*1) Benzene, Total BTEX, and Total Lead shall be measured on discharges from pipe or vessel which have been used for the storage or transportation of liquid or gaseous petroleum hydrocarbons. Total Organic Carbon (TOC) shall be measured on discharges from pipelines, flowlines, piping, vessels, or tanks which have previously been in service – i.e., those which are not new. Accordingly, Flow, TSS, Oil & Grease and pH are the only testing requirements for new pipe or vessels.

(*2) The background concentration of Total Suspended Solids (TSS) will be allowed in the discharge if the effluent is being returned to the same water source from which the intake water was obtained. In these cases, the permit limitations will be 90 mg/L plus the concentration of TSS in the intake water. The TSS concentration of the intake water shall be reported on the Discharge Monitoring Report (DMR) along with the concentration of TSS in the effluent.

EFFLUENT LIMITATIONS BASIS for Outfall 004:

Flow: The requirement to report flow is based upon LAC 33:IX.2707.I.1.b.

TSS, Benzene, Oil & Grease, TOC, Total BTEX, Total Lead and pH: Limitations are based upon the Hydrostatic Test Wastewater General Permit (LAG670000)

D. MONITORING FREQUENCIES

The permittee requested monitoring frequency reductions at Outfall 001 based upon the USEPA Memorandum "Interim Guidance for Performance-Based Reductions of NPDES Permit Monitoring Frequencies". Based upon the facility's effluent data, indicating a ratio of the long term monthly average to the monthly permit limit of less than 25%, monitoring frequency reductions have been made for BOD, Oil & Grease, TSS, Ammonia, Sulfide and Phenolic Compounds. This Office has reduced the monitoring frequencies for BOD, Oil & Grease, TSS, Ammonia, Sulfide and Phenols to 1/week. The requested monitoring frequency reduction for

COD has been denied based upon current office guidance for frequencies of conventional and nonconventional parameters at major facilities.

All other monitoring frequencies established in the draft permit are based upon the previous permit. Whole Effluent Toxicity testing frequency is based upon recommendations from the Municipal and General Water Permits Section (see Appendix D).

E. WHOLE EFFLUENT TOXICITY

It has been determined that there may be pollutants present in the effluent which may have the potential to cause toxic conditions in the receiving stream. The State of Louisiana has established a narrative criteria which states, "toxic substances shall not be present in quantities that alone or in combination will be toxic to plant or animal life." The Office of Environmental Services requires the use of the most recent EPA biomonitoring protocols.

Whole effluent biomonitoring is the most direct measure of potential toxicity which incorporates both the effects of synergism of effluent components and receiving stream water quality characteristics. Biomonitoring of the effluent is, therefore, required as a condition of this permit to assess potential toxicity. The biomonitoring procedures stipulated as a condition of this permit for Outfall 001 are as follows:

TOXICITY TESTS	FREQUENCY
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 48-Hour Acute, Pimephales promelas	1/year
NOEC, Value [%], Lethality, Static Renewal, 48-Hour Acute, Pimephales promelas	1/year
NOEC, Value [%] Coefficient of Variation, Static Renewal 48-Hour Acute, Pimephales promelas	1/year

NOEC, Pass/Fail [0/1], Lethality, Static Renewal 48-Hour Acute, Daphnia pulex	1/year
NOEC, Value [%], Lethality, Static Renewal 48-Hour Acute Daphnia pulex	1/year
NOEC, Value [%] Coefficient of Variation, Static Renewal 48-Hour Acute, Daphnia pulex	1/year

Toxicity tests shall be performed in accordance with protocols described in the latest revision of the "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms." The stipulated test species are appropriate to measure the toxicity of the effluent consistent with the requirements of the State water quality standards. The biomonitoring frequency has been established to reflect the likelihood of ambient toxicity and to provide data representative of the toxic potential of the facility's discharge in accordance with regulations promulgated at LAC 33:IX.2715/40 CFR Part 122.48.

Results of all dilutions as well as the associated chemical monitoring of pH, temperature, hardness, dissolved oxygen, conductivity, and alkalinity shall be documented in a full report according to the test method publication mentioned in the previous paragraph. The permittee shall submit a copy of the first full report to this Office. The full report and subsequent reports are to be retained for three (3) years following the provisions of Part III.C.3 of this permit. The permit requires the submission of certain toxicity testing information as an attachment to the Discharge Monitoring Report.

This permit may be reopened to require effluent limits, additional testing, and/or other appropriate actions to address toxicity if biomonitoring data show actual or potential ambient toxicity to be the result of the permittee's discharge to the receiving stream or water body. Modification or revocation of the permit is subject to the provisions of LAC 33:IX.3105/40 CFR 124.5. Accelerated or intensified toxicity testing may be required in accordance with Section 308 of the Clean Water Act.

Dilution Series

The permit requires five (5) dilutions in addition to the control (0% effluent) to be used in the toxicity tests. The additional effluent concentrations shall be 0.057%, 0.075%, 0.10%, 0.13%, and 0.18% effluent. The low-flow effluent concentration (critical dilution) is defined as 0.13% effluent.

IX. Compliance History/DMR Review:

Enforcement Review:

As of December 11, 2009, the facility has no open enforcement actions.

DMR Review:

There were no effluent limitations excursions reported for the period June 2007 – December 2009:

Inspections:

The last inspection of the facility was September 26, 2008. No areas of concern were noted.

X. Endangered Species:

The receiving waterbodies for Motiva Enterprises, LLC are Subsegment 070301 of the Mississippi River Basin and Subsegment 040403 of the Lake Pontchartrain Basin. Segment 070301 of the Mississippi River Basin has been identified by the U.S. Fish and Wildlife Service (FWS) as habitat for the Pallid Sturgeon, which is listed as a threatened or endangered species. The draft permit and fact sheet will be submitted to the FWS for review in accordance with a letter received January 8, 2010 from Rieck (FWS) to Nolan (LDEQ). As set forth in the Memorandum of Understanding between the LDEQ and the FWS, LDEQ has made a preliminary determination that the issuance of the LPDES permit is not likely to have an adverse effect upon the Pallid Sturgeon. However, after consultation with the FWS, the LDEQ may choose to modify this permit based on information provided by the FWS. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. Therefore, the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat.

XI. Historic Sites:

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

XII. Tentative Determination:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for the discharges described in the application.

XIII. Variances:

No requests for variances have been received by this Office.

XIV. Public Notices:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the fact sheet. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

A public notice will be published in a local newspaper of general circulation and in the Office of Environmental Services Public Notice Mailing List.

XV. TMDL Waterbodies:

Motiva Enterprises, LLC discharges process wastewaters, utility wastewaters, miscellaneous wastewaters, stormwater and sanitary wastewaters to the Mississippi River (Segment 070301). Segment 070301 is not listed on LDEQ's Final 2006 303(d) List as impaired, and to date no TMDLs have been established.

The discharges from Outfalls 002 (consisting of low contamination potential stormwater, utility wastewaters and miscellaneous wastewaters) are to the St. James Canal thence to Blind River of the Lake Pontchartrain Basin; Segment 040403. This segment is currently impaired for nutrients (nitrate + nitrite as N), phosphorus, sedimentation/siltation, organic enrichment/low DO, mercury

and turbidity. TMDLs are scheduled for completion by March 31, 2011, with an EPA backstop date of March 31, 2012. Because Outfall 002 consist of low contamination potential stormwater, utility wastewaters and miscellaneous wastewaters, it has been determined that the discharges are not expected to cause or contribute to further impairment of the receiving stream. However, for data gathering purposes to be used in future TMDL Development, reporting requirements have been added to Outfall 002 for total nitrogen, total phosphorus and turbidity. Reporting requirements for Mercury were not established in the permit because the suspected cause of the impairment is atmospheric deposition.

A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by any future TMDLs.

XVII. Stormwater Pollution Prevention Plan (SWP3) Requirements:

In accordance with LAC 33:IX.2707.I.3 and 4[40 CFR 122.44(I)(3) and (4)], a Part II condition is proposed for applicability to all stormwater discharges from the facility, either through permitted outfalls, through outfalls which are not listed in the permit or as sheet flow. The Part II condition requires implementation of a Storm Water Pollution Prevention Plan (SWP3) within six (6) months of the effective date of the final permit, along with other requirements. If the permittee maintains other plans that contain duplicative information, that plan could be incorporated by reference into the SWP3. Examples of these type plans include, but are not limited to: Spill Prevention Control and Countermeasures Plan (SPCC), Best Management Plan (BMP), Response Plans, etc. The conditions will be found in the draft permit. Including Best

Management Practice (BMP) controls in the form of a SWP3 is consistent with other LPDES and EPA permits regulating similar discharges of storm water associated with industrial activity, as defined at LAC 33:IX.2511.B.14 [40 CFR 122.26(b)(14)].